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(54) Title: **TISSUE VOLUME REDUCTION**

(57) **Abstract:** Devices, compositions, and methods for achieving non-surgical lung volume reduction (e.g., bronchoscopic lung volume reduction (BLVR)) are described. BLVR can be carried out by collapsing a region of the lung, adhering one portion of the collapsed region to another, and promoting fibrosis in or around the adherent tissue.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC 7 A61K38/36 A61K38/48 A61K45/06 A61M16/04 A61B1/267 //((A61K38/36, 38:00), (A61K38/36, 31:00), (A61K38/48, 38:00), (A61K38/48, 31:00))		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IPC 7 A61K A61M A61B		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)		
WPI Data, EPO-Internal, PAJ, BIOSIS, MEDLINE		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 25782 A (HAEMACURE CORPORATION) 27 May 1999 (1999-05-27) page 2, line 14 – line 16; claims 1-3,6,9,14,19-22 page 5, line 8 – line 10 --- WO 95 13748 A (BIOSEAL, LLC) 26 May 1995 (1995-05-26) page 4, line 1 –page 6, line 17; claims 1,15,16; figures 7-10 page 7, line 3 – line 13 --- EP 0 303 756 A (B. BRAUN MELSUNGEN AG) 22 February 1989 (1989-02-22) the whole document ---	35-38, 40-42,54 43,54 45-53 45-53 ---/---
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.		<input checked="" type="checkbox"/> Patent family members are listed in annex.
* Special categories of cited documents : *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed		
T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family		
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 886 496 A (C.S. CONOSCENI ET AL.) 12 December 1989 (1989-12-12) the whole document ---	45-53
X	US 5 728 132 A (R.A. VAN TASSEL ET AL.) 17 March 1998 (1998-03-17) the whole document ---	43, 54
E	WO 01 02042 A (PULMONX) 11 January 2001 (2001-01-11) page 2, line 29 -page 3, line 33; claims page 8, line 16 - line 32 ----	1, 13-15, 19, 33, 34, 45-51

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)		Publication date
WO 9925782	A 27-05-1999	EP NO	1032367 A 20002357 A	06-09-2000 14-06-2000
WO 9513748	A 26-05-1995	US AU	5437292 A 1184395 A	01-08-1995 06-06-1995
EP 303756	A 22-02-1989	JP US	1056031 A 4878898 A	02-03-1989 07-11-1989
US 4886496	A 12-12-1989	NONE		
US 5728132	A 17-03-1998	EP NO	0941697 A 980902 A	15-09-1999 03-09-1999
WO 0102042	A 11-01-2001	NONE		